

Mediterranews

CONSERVING THE NATURAL BEAUTY OF BAJA CALIFORNIA

No.10 • Ensenada, Baja California • February 2018

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TERRA NEWS

Terra
Peninsular

PARTICIPA EN LA SEMANA DE ACTIVIDADES DEL

2DO. FESTIVAL DE LAS AVES

EN LA BAHÍA DE TODOS SANTOS
QUE ORGANIZA TERRA PENINSULAR A.C.



**¡ENTRADA
GRATUITA!**

- MARTES 6 DE MARZO
CINECLUB "PLAYERAS AL VUELO"
AUDITORIO DE CARACOL MUSEO
DE CIENCIAS DE 3:00 PM A 4:00 PM

- JUEVES 8 DE MARZO
LIMPIEZA COMUNITARIA
DE PLAYA HERMOSA
DE 9:00 AM A 11:00 AM

- VIERNES 9 DE MARZO
"ENCUENTRO POR LAS AVES: JORNADA
DE EXPOSICIONES" EN GALERÍA ERNESTO
MUÑOZ ACOSTA CEARTE
DE 5:00 PM A 7:00 PM

MESA DE EXPOSICIONES:
- CONTACTO SALVAJE A.C., CLUB DE
OBSERVACIÓN DE AVES LOS CORRECAMINOS,
CICESE Y TERRA PENINSULAR A.C.
- CONFERENCIA MAGISTRAL

• SÁBADO 10 DE MARZO •

2DO. FESTIVAL DE LAS AVES EN LA BAHÍA DE TODOS SANTOS EN
EXPLANADA DE PLAYA HERMOSA DE 10:00 AM A 5:00 PM

ACTIVIDADES: RECORRIDOS Y MARATÓN DE OBSERVACIÓN DE AVES. TALLER DE
PARCHES BORDADOS. PRESENTACIÓN EN VIVO CHILDS. TALLER IMPRINTA. MURALISMO
PARTICIPATIVO. VENTA DE COMIDA. STANDS INTERACTIVOS E INFORMATIVOS.



Más información en:

www.terrapeninsular.org/festival-aves-bahia-todos-santos/

Message from the

Executive Director



César Guerrero

I'm very happy to share with you the first issue of *Mediterranews* in 2018. We've begun this year at full speed, I always come back from the holidays with new purposes, many goals and some resolutions.

This year has not been the exception: at Terra Peninsular we are starting the year with a positive attitude. We have many projects and great news for San Pedro Mártir, El Rosario, Bahía de Todos Santos and our second home, the majestic and impressive San Quintín Bay.

Other news to share is that this year the Ramsar site in San Quintín Bay celebrates its tenth anniversary, worldwide this is the Wetland of International Importance no. 1775 and one of five located in Baja California.

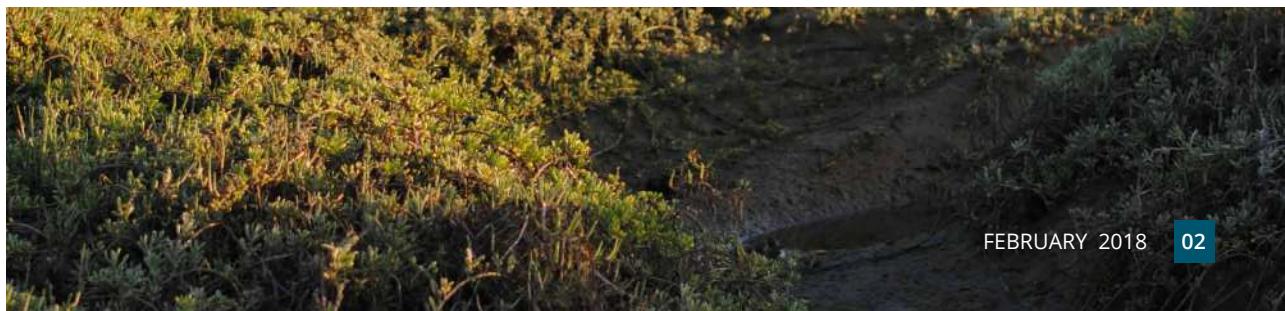
I believe there are good things ahead in 2018, despite the alarming global landscape and the not less worrying national landscape. I'm optimistic for this year that we started and I am sure that we will have many good stories to tell in the next winter.

Also, this year we began to consolidate important alliances. We are very pleased to formalize our collaboration with the National University of Mexico (UNAM), University of the Americas Puebla (UDLAP) and particularly with the Museum of Natural History of San Diego (The Nat).

Our philosophy has always been the same: we will achieve sustainability to the extent to which our project begin to belong to all of us and ceases to be only our's.

Therefore, today we are not only working with communities, universities, and government, we also want to work together with all of you. We demand our right to a healthy environment and let's fulfill our responsibility of taking care of it together.

César Guerrero
Executive Director of Terra Peninsular





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Mediterranews

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COVER PHOTO
El Arco wetland and the
Sudoeste volcano in the
background, in San Quintín,
Baja California.
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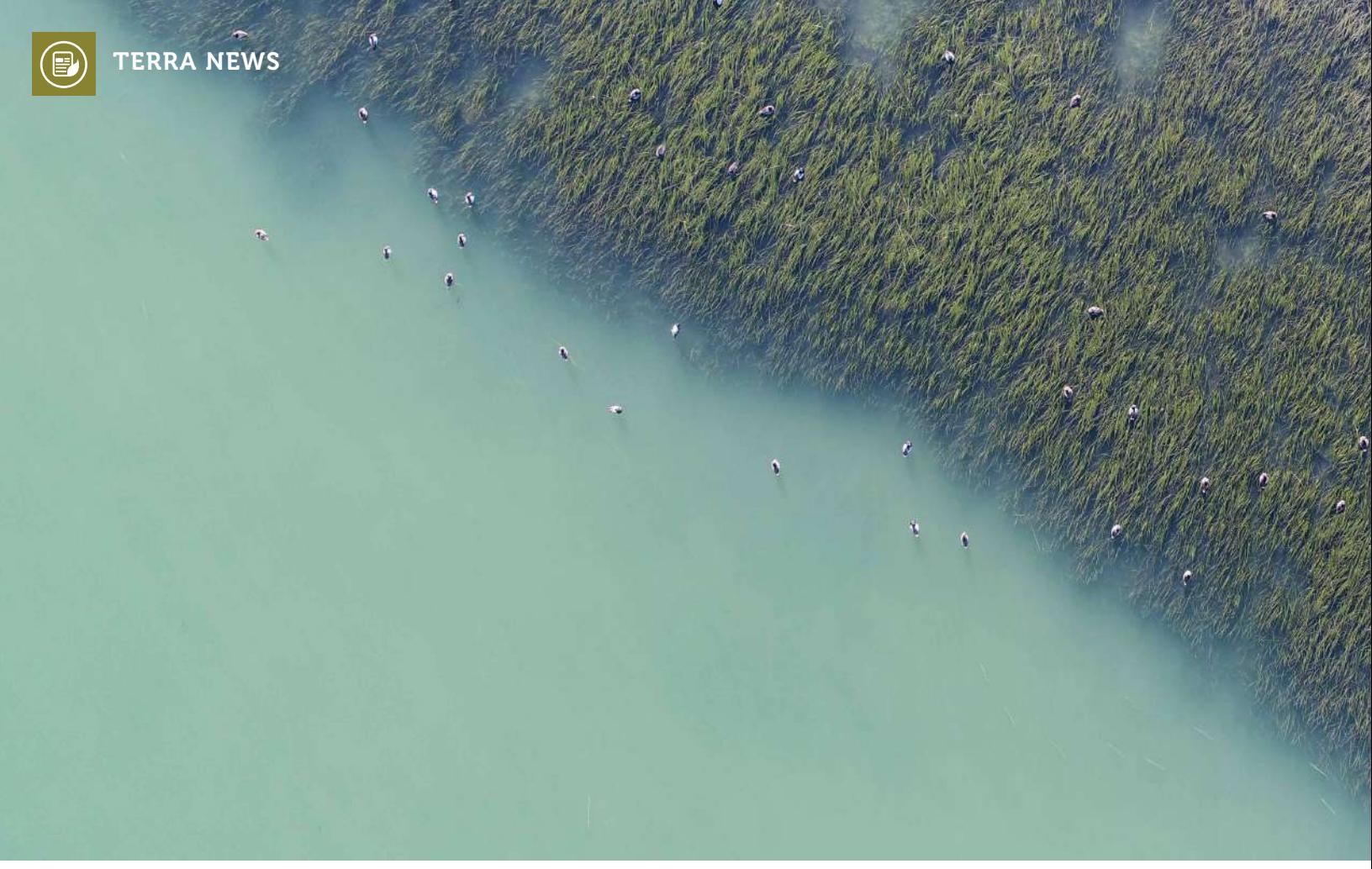
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San Quintín Bay:

10 th

Anniversary as a Wetland of International Importance

By Verónica Meza / Land Protection
Coordinator of Terra Peninsular

According to the Ramsar Convention “Wetlands are among the most productive ecosystems in the world”, hence the importance of conserving them and ensuring access to food production for economic development and human health.

Because the rate at which wetland habitats have disappeared in recent decades has been alarming, the Convention on Wetlands (signed in Ramsar) intends for governments to commit and change the course of loss and degradation of these areas (Ramsar Convention Secretariat, 2013).

San Quintín is included in the List of Wetlands of International Importance (known as the Ramsar list) since February 2, 2008, it is considered a priority area for its protection according to criteria that establish the importance of representative, rare or unique wetlands, which are used by endangered species and ecological communities, as well as by important aquatic birds populations due to their density and worldwide distribution.



Photo: Jorge Andrade

The site number 1775 covers an area of 1,3437 acres, and it consists of a coastal plain and a slightly hypersaline coastal lagoon, where, according to Massey and Palacios (1994), endangered species spend the winter, feed and reproduce. Some of these species are:

- Light-footed clapper rail (*Rallus longirostris levipes*)
- Black rail (*Laterallus jamaicensis*)
- Least tern (*Sterna antillarum browni*)
- Belding's savannah sparrow (*Passerculus sandwichensis beldingi*)
- California gnatcatcher (*Polioptila californica atwoodi*)
- Western snowy plover (*Charadrius alexandrinus nivosus*)

In addition, each winter the site welcomes between 30 and 50% of the total population of the black brant (*Branta bernicla nigricans*), a migratory species that arrives from Alaska to San Quintín Bay.

According to the Information Sheet on Ramsar Wetlands, the federal jurisdiction of the Ramsar site is under the responsibility of the Secretariat of Environment and Natural Resources (Semarnat) of the Mexican government.

Additionally the management of the site is in charge of the National Commission of Natural Protected Areas (Conanp) with the support of Terra Peninsular for surveillance, management and monitoring of the site.

Ten years after the integration of San Quintín Bay into the Ramsar list, Terra Peninsular and Conanp have managed to define some important areas with additional protection within the Ramsar site, such as:

- 14 destination agreements for the conservation of the coastal area;
- 5 concessions for the conservation of the coastal area;
- 2 Areas Voluntarily Destined for Conservation: Punta Mazo and Monte Ceniza nature reserves.

Together, these areas add a total of 5,915 acres, and represent over 40% of the total area.



Photo: Terra Peninsular A.C.



Ramsar Site in San Quintín Bay

San Quintín Bay is 1 of the 5 Ramsar sites in Baja California

This designation was achieved through the Coalition for the Protection of San Quintín Bay, integrated by Pro Esteros, The Nature Conservancy, Pronatura Noroeste and Terra Peninsular

Ramsar site number:

1775

Surface:

1,3437 acres

Date of designation:

February 2, 2008

The Convention on Wetlands (called the Ramsar Convention) is a treaty for the conservation and sustainable use of wetlands and their resources that was created in Ramsar, Iran in 1971.
<https://www.ramsar.org/>

Ramsar sites in Baja California:

1 Coastal Corridor La Asamblea-San Francisquito, Mar de Cortez:
109,477.09 acres

2 San Quintín Bay:
13,437.59 acres

3 Isla Rasa, Mar de Cortez:
163.09 acres

4 Estero of Punta Banda:
5,913.87 acres

5 Hanson Lagoon, Constitution of 1857 National Park:
1,262.65 acres



In Mexico there are **142 Ramsar sites**, this represents **21,358,751 acres** of protected wetlands



Monitoring of Brants: from *Branta bernicla* *nigricans* to Bourbon Porter

By Bárbara Ramírez and Jonathan Vargas
/ Terra Peninsular

In order to achieve the objectives of the conservation project, Terra Peninsular works in three main areas: Land Protection, Community Engagement, and Adaptive Management. For the past 8 years and as part of the Adaptive Management strategy, Terra Peninsular along with the CICESE and other partners, have conducted migratory birds monitoring in northwestern Mexico. These monitoring projects focus on vulnerable species and of conservation interest. Some of these projects focus on Breeding Birds Survey (BBS), monitoring of migratory shorebirds, monitoring of snowy plovers (*Charadrius nivosus*) and least tern (*Sternula antillarum*), both classified as threatened species in Mexico, and winter monitoring of black brant (*Branta bernicla nigricans*).



Snowy plover monitoring (*Charadrius nivosus*) in December 2017. Photo: Jonathan Vargas.

The black brant is a characteristic species of the San Quintín Bay and since Terra Peninsular has its origins in this bay, there was no better species than the black brant to name our first cause-marketing product: the Branta Negra beer.

Branta bernicla nigricans

Taxonomic classification:

Family: Anatidae
Genus: *Branta*
Species: *Branta bernicla*
Subspecies: *nigricans*
Conservation status: priority species for conservation in North America. In Mexico, it is not protected at the federal level.



Branta Negra bourbon porter

Taxonomic classification:

Family: Ale
Genus: Porter
Species: Bourbon porter
State of conservation: endangered species, last bottles available.





The monitoring information is collected in the field and then recorded into databases to later compare the results obtained with other sites within the migratory route of the black brant.

Photo: Jonathan Vargas.

The black brant is a goose that breeds in Alaska and winters in southwestern United States and northwest of Mexico. Each year, about 30,000 individuals of black brant arrive in San Quintín Bay to spend the winter.

The Branta Negra Beer is bourbon porter style and is produced by Cervecería Escafandra, a craft brewery in Ensenada. This beer is seasonal, which means that it is only available during the winter months to match the presence of the bird in San Quintín Bay.



Winter monitoring of black brant in San Quintín Bay.
Photo: Jorge Andrade.





Photo: Alan Harper



2017/2018 season

From January 14 to 25, 2018, members of Terra Peninsular, CICESE, CIBNOR, UABC and Environment for the Americas conducted a black brant monitoring in several places of the Baja California peninsula such as Estero Punta Banda, San Quintín Bay, San Ignacio Lagoon, Laguna Ojo Lagoon Complex, Liebre-Guerrero Negro, and Laguna Manuela.

Other organizations that collaborate with Terra Peninsular perform simultaneous monitoring of black brants in Sinaloa and Sonora. These results are compared with the monitoring conducted in the United States and Canada to get a better overview of the status of the wintering populations of this species.

Long-term monitoring projects such as black brants' are important because they provide relevant information on the population trends of the species, and allow to identify variations and modifications in habitats. This information allows us

to understand the dynamics of bird populations and they help us to evaluate the conservation status of the wintering places of the black brant. Some hypotheses that seek to explain the population variations that have been observed in recent years are attributed to the loss of seagrass cover due to the increase in water temperature, caused by the effects of climate change. The black brant is a good indicator of habitat quality. Since it is a species that feeds on seagrasses in coastal lagoons such as San Quintín Bay, it depends on the availability of seagrasses at wintering sites; therefore, if there are any modifications in seagrass coverage, these geese are the first to warn us.

To conduct a monitoring, the Terra Peninsular team of biologists, in coordination with Dr. Eduardo Palacios (full researcher at CICESE and member of Terra Peninsular's board of directors) collect the information in the field and, later in the office, add the results and record them into a database.

As we go to press, the information obtained in the field was still being gathered. The results of the winter count will be published soon on the Terra Peninsular website www.terrapeninsular.org and in our social media.■

As for the Branta Negra beer, the 2017-2018 season began on November 1. For this season, the production had to be increased four times in amount due to the success obtained in the 2016-2017 season. The Branta Negra Beer has been available at the Cervecería Escafandra stand within Margherita GastroPub in Ensenada, and at Posada Don Diego and Molino Viejo in San Quintín.

The Branta Negra Beer is a cause-marketing product created to accomplish three main objectives:

- 1** To establish a business relationship with a local company.
- 2** To share information about the black brant species.
- 3** To raise funds for the conservation projects that Terra Peninsular performs in San Quintín Bay and that protect the habitat of the black brant.



ESCAFANDRA
CERVECERIA

Join our mailing list and follow us on social media to learn more about the black brant monitoring and the Branta Negra beer!



[www.facebook.com/
CervezaBrantaNegra/](https://www.facebook.com/CervezaBrantaNegra/)

Ensenada



BEER FEST

2018



Cerveza Branta Negra
disponible en el stand

#53
DE ESCAFANDRA
16 Y 17 DE MARZO
en el Centro Social,
Cívico y Cultural
Riviera, Ensenada, B.C.



ESCAFANDRA
CERVECERIA



Geodiversity, Geological Heritage and Tourism in the San Quintín Bay and Surrounding Areas

By Jorge Alberto Miros and Miguel Agustín Téllez

Figure 1. San Quintín Bay and surrounding areas.



Figure 2. Anthony's liveforever (*Dudleya anthonyi*) is a species of endemic succulent found in the Volcanic Field in San Quintín that grows on top of the basalt rocks (rock with a high level of magnesium and iron).



The biodiversity or biological diversity is a concept used to describe the landscape. However, the geodiversity or diversity of geological elements (such as rocks, minerals, fossils, soil and the process that shape the earth, including human activity) is often ignored, despite it explains the geological and biological landscape that surrounds us.

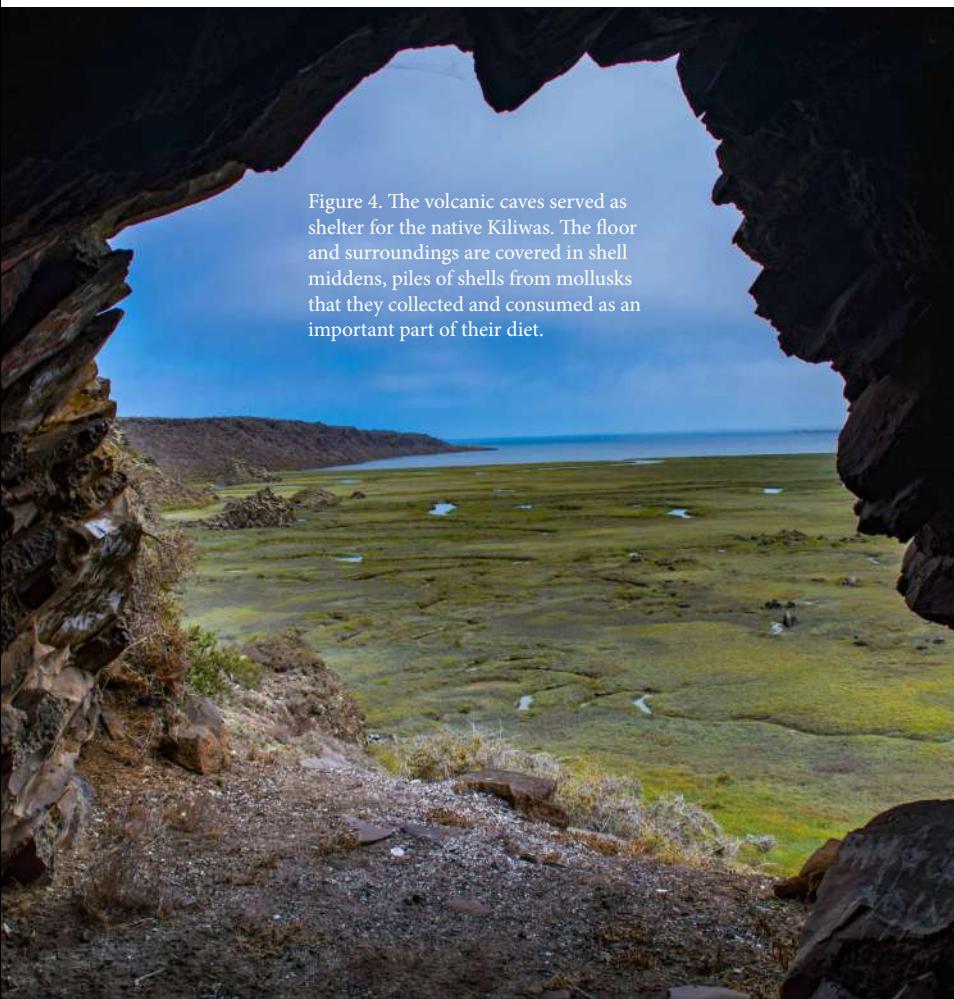
Just like an artist, nature has chiseled the geological scenery that we observe. Millions of years of history are registered in earth rocks, as well as the rise and evolution of the living beings is recorded in the fossils on these rocks.

Preserving the history of Earth, the record of life on it, and the rise of the human being and its culture are indisputably important. For this reason, the geodiversity studies are needed to recognize the **geological heritage** of a region, in other words, the sites that are conservation priority sites because of their historical, scientific, educational and cultural importance and to encourage sustainable development through tourism, like the San Quintín Bay and its surrounding areas (figure 1).

Geodiversity predetermines biodiversity and it is related to the culture

The distribution of flora and fauna is strongly influenced by the physical environment that drives from geodiversity (figure 2). Likewise, geodiversity is related to the cultural heritage, since human beings, from the beginning, have had the need to analyze the geological scenery to gather materials and elaborate all kind of things, from tools to buildings. Therefore, the biological and cultural variety depend to a large extent on the geological characteristics of the landscape.

The aridity of Baja California lets us appreciate the geological scenery on which the life of the ancient inhabitants depended. Its uncommon features favored a "cultural freezing" in the prehistoric era, when native semi-nomads survived by benefiting from rocky safeguards to shield themselves, and by making gadgets of carved stone, mainly used for hunting and harvesting. In addition to that, they used natural mineral pigments in their artistic expressions like the cave paintings.



The geological and cultural heritage of the San Quintín Bay and surrounding areas

On a regional level, the San Quintín Bay stands out for its versatility of landscapes. It sits on a peculiar volcanic field, unique in the peninsula of Baja California, which originated by a process called "intraplate volcanism". Volcanoes or ash cones are formed by the upward flow of molten rock originated on the asthenospheric mantle (figure 3), on the end of the Pleistocene (~180 thousand years).

Volcanic caves, basalt spills, pillow lavas, tombolos, marshes, dunes, coastal cliffs and geosymbols are part of the geological features of the bay. Associated to them, there are paleontological sites with remains of mammoths and mollusks fossils, as well as a high number of shell midden archaeological sites on its shores (figure 4).

North of the bay, there are evaporite or salt deposits close to Laguna Figueroa, where microbial mats originate structures called stromatolite. These structures are unique in the region, and have a very high scientific value due to their similitude to the first living beings than appeared 3,500 million years ago. Because of this, studying them allows us to have a better understanding of how life on Earth emerged.

South of the bay, some dune fields, marine terraces of the former sea level, and amazing formations such as La Lobera stand out (figure 5).

El Rosario, the oldest town in Baja California, is surrounded by whimsical formations in sediments deposited in the Late Cretaceous (~75 million years) that contain invertebrate marine fossils like ammonites, primitive land mammals, petrified wood and dinosaur bones (figure 6). Furthermore, the cultural heritage of the area holds prehistoric remains and ruins of the mission period.



Geotourism and geoparks

Altogether, these landscape features represent a geological and cultural heritage of great relevance on a national and international level that deserves to be preserved. However, it is also possible to make use of it in a sustainable way for the benefit of the local community. In this sense, geotourism is a conservation scheme that promotes the benefit from the landscape, where the tourist can get to know it, appreciate it, and value the history of Earth by stimulating activities that are favorable to its conservation and encouragement of the local economy. On an international level, geotourism has been pushed forward under the scheme of UNESCO Geoparks, which promote the conservation of high-value heritage landscapes through geotourism based on community participation.

Creating a geopark, that could even be recognized by the UNESCO, in the San Quintín Lagoon Complex, the San Quintín volcanic area, and El Rosario is feasible b

Because of its geological, biological and cultural relevance, it is feasible to create a geopark in the San Quintín Lagoon Complex, the San Quintín volcanic area, and El Rosario altogether; a geopark that could even be recognized by the UNESCO. In order to accomplish this, the active participation of the local population, non-profit organizations and government will be needed. ■

Figure 6. Reconstruction and interpretation of the theropod dinosaur *Labocania anomala* (Molnar, 1974), this specimen has only been found on the strata of Grupo Rosario (La Bocana Roja Formation). Modified image by García-Mora (2013).

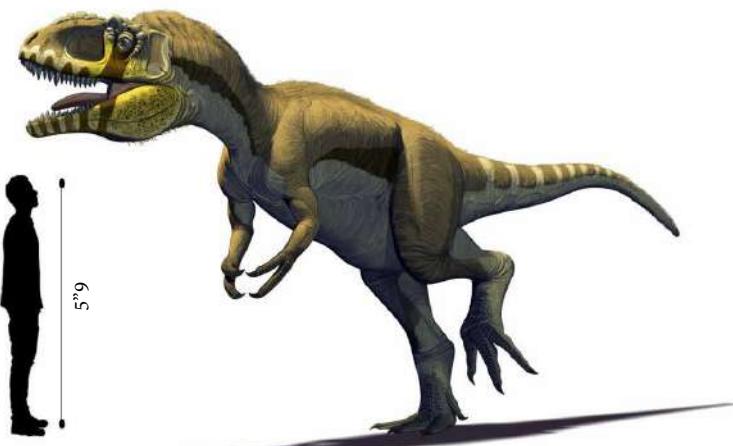


Figure 5. La Lobera (El Desfondadero) is a collapsed cave molded by the recurrent erosions generated by the waves and the wind on the sedimentary rocks. The interior serves as a shelter for the harbor seals (*Phoca vitulina*).

ABOUT THE AUTHORS

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Holds a bachelor's degree in Environmental Sciences and a master's degree in Coastal Oceanography oriented to the coastal geology and geologic information systems. Throughout his career, he has developed environmental education, geological and cultural heritage conservation projects in northwest Mexico.

Miguel Agustín Téllez Duarte, PhD.

He is a professor-researcher at the Coastal Geology Department of the School of Marine Sciences at the Autonomous University of Baja California in Ensenada. His extensive expertise includes topics related to paleontology, stratigraphy and taphonomic processes. He has also participated in the development of several projects oriented to the dissemination of the geological, paleontological and cultural heritage of Baja California.

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› What Does it Mean to Be an Authorized Donee?

By Mercedes Vega / Finances and Administration Leader

One of the major concerns of non-profit organizations is obtaining financial resources to carry out their activities, whether they work to promote and protect human rights, provide support for economically disadvantaged people or protecting the environment.

An alternative solution to the lack of resources is the diversification of funding sources, and being an authorized donee in Mexico to receive donations from abroad is a totally feasible strategy for organizations already established.

Terra Peninsular is an authorized donee in Mexico since 2014 and we have the fiscal sponsorship of the International Community Foundation (ICF) and Endangered Habitats League (EHL) in the United States, this way people who donate in that country can request tax-deductible receipts to our fiscal sponsors.



What does it mean for an organization to be an authorized donee in Mexico?

- Accessing national and international lists to receive economic resources from foundations, companies and people or even receiving an inheritance from someone.
- Having legal certainty to receive donations by being included at the Official Gazette of the Federation in Mexico every year.

What does it mean to donate to an authorized donee?

- The donor -an individual or a company- can request a tax-deductible receipt after the donation.

Learn how to make your contribution to Terra Peninsular at www.terrapeninsular.org/en/ and support our conservation projects in Baja California.

This Terra Story was published on Terra Peninsular's blog. You can read the online version in www.terrapeninsular.org Subscribe and each week receive our Terra Stories and new information via email.



Rancho La Concepción Nature Reserve

By Verónica Meza and Antonieta Valenzuela / Terra Peninsular
Infography by Laura Tamayo

Location: Sierra de San Pedro Martir, Baja California

Surface: 1235 acres

Date of certification:
September 4, 2013

Degree of protection: Area Voluntarily
Destined for Conservation



The Rancho La Concepción Nature Reserve is located 3 miles north of the road that leads to the Sierra de San Pedro Martir National Park, next to the ejido Bramadero, in Baja California.

Known as Baja Dark Skies Ranch, this area belongs to Observatorio Concepción SRL de CV and it's protected under an agreement with Terra Peninsular.

Find more information on
Baja Dark Skies Ranch at
www.bajadarkskies.wordpress.com/

Of the nature reserve's total surface, 1082 acres are destined for conservation and 153 as area of use. The ranch has two adobe houses for visitors, both uses clean energy from solar panels and have all the necessary services and amenities.

The reserve is certified as a Natural Protected Area by the Mexican government in the category of Area Voluntarily Destined for Conservation.

Fauna

- Coyote (*Canis latrans*)
- Grey fox (*Urocyon cinereoargenteus*)
- Swift fox (*Vulpes velox*)
- Ringtail (*Bassariscus astutus*)
- Bobcat (*Lynx rufus*)
- Mule deer (*Odocoileus hemionus*)
- Puma (*Puma concolor*)

Birds

Some of the birds species that can be seen in the reserve are woodpeckers, hummingbirds, eagles, falcons, and vultures, among others.



- Loggerhead shrike (*Lanius ludovicianus*)
- Western bluebird (*Sialia mexicana*)
- Grey thrasher (*Toxostoma cinereum*)
- Acorn woodpecker (*Melanerpes formicivorus*)
- Mountain quail (*Oreortyx pictus*)
- White-breasted nuthatch (*Sitta carolinensis*)

Some of the species found in the reserve are listed by the Mexican government as endangered:



- California incense-cedar (*Calocedrus decurrens*)
- American badger (*Taxidea taxus*)
- Gilbert's skink (*Plestiodon gilberti*)
- Speckled rattlesnake (*Crotalus mitchellii*)
- California condor (*Gymnogyps californianus*)

Things what
to do:



Hiking



Scientific research
and monitoring



Photography



Camping



Bird
watching



Reptiles

- Garden slender salamander (*Batrachoseps major*)
- Zebra-tailed lizards (*Callisaurus draconoides*)
- Banded rock lizard (*Petrosaurus mearnsi*)
- Coast horned lizard (*Phrynosoma coronatum*)
- California red legged frog (*Rana draytonii*)



Archaeological sites

Within the nature reserve there is a trail that leads to two ancient constructions and a cemetery with 6 tombs, these sites were registered at the National Institute of Anthropology and History in Mexico (INAH) in 2013.

According to the information provided by the INAH, the first house belonged to Mrs. Espinoza, better known as Doña Chepa (from the indigenous community Kiliwa) who married an American man named Tom Farlow. The only fact known about the second house is that it was built by a German miner.

Recommendations

- To visit the reserve, please contact us at reservas@terrapeninsular.org
- A four-wheel drive is required to arrive due to the conditions of the road



Flora

The reserve presents chaparral habitats and pine forest, as well as oaks and other species of the riparian habitat.

- Jeffrey pine (*Pinus jeffreyi*)
- Lodgepole pine (*Pinus contorta*)
- Yerba mansa (*Anemopsis californica*)
- California fuchsia (*Epilobium canum*)
- Mojave yucca (*Yucca schidigera*)
- California barrel cactus (*Ferocactus cylindraceus*)





➤ **Sailing in the Same Ship: 3rd Bird Festival in San Quintín**

By Claudia Guzmán and Mirna Borrego
/ Community Engagement

When describing our experience in the 3rd Bird Festival in San Quintín, (which took place in La Chorera on December 9, 2017) an image of a ship comes to our minds. Like any other boat trip, there are two elements needed to meet its purpose: destination and crew.

DESTINATION

The community La Chorera in San Quintin was our event location. This magical place privileged by nature, whose inhabitants live together with migratory shorebirds on a daily basis, is where we hosted the Bird Festival for the third time.

Setting a destination helped us greatly not to feel adrift and not to lose sight of our objectives that gave us the strength to create an unforgettable festival, and guided us to connect ourselves with nature, beauty, and with the complexity of birds that live and visit the San Quintin Bay.

Before arriving to our destination, like any other explorer, we announced the trip. Prior to festival, we went from door to door to invite different schools, community groups and families to join us at the festival, celebrate, learn, and see birds from a different perspective. A celebration where the main attraction is being grateful for the opportunity of living in such a privileged place, and to express our interest and compromise to protect what belongs to all of us.

THE CREW

It was a two-months roller coaster ride where we bumped into different faces and ideas. But none of it could have been possible without the help of the crew:



This Terra Story was published on Terra Peninsular's blog.
You can read the online version in www.terrapeninsular.org
Subscribe and each week receive our Terra Stories and new
information via email.

Antonio and Nichelle from the duet Son Jarocho: *Sur y Norte Moviendo el Son*.

Like a heat wave, they brought joy to the festival to the rhythm of “*¿Qué pajarito es aquél que canta en aquella lima, que canta en aquella lima? ¿qué pajarito es aquél?*”. These rhymes talked about the relationship of man and nature, the beauty of birds, sea, and the celebration of life, festivities and joy. Before the farewell, Antonio and Nichelle, with their wings wide open and ready to fly, they sang “*Se mira una mancha negra en medio del mar profundo, se está muriendo la tierra, vamos destruyendo al mundo*”.



Photo: Antonieta Valenzuela

Ernesto Salmerón and Damián Martínez from the organization Contacto Salvaje.

Their performance has become a tradition in our bird festivals. This time, they brought out their best with an informative stand and a brilliant exhibition with more than six birds of prey that captivated the feelings and hearts of all attendants.



Photo: Antonieta Valenzuela

Ixchel López from Escuela de la Madre Tierra. Female wisdom made itself present with the proposal of a wall of biodegradable products and medicinal plants. Without a doubt, this stand brought a holistic view of conservation to the festival.

Vicente Rodríguez from CONABIO.

Are birds really dinosaurs? Can we all be citizen scientists? We learned this and many other discoveries after the most interesting lecture of “Birds in Mexico and my community”.

Telesecundaria #59. Eight pairs of eyes sharing with us the beauty that surrounds us were part of the photographic exhibition titled “The privileges of my community”. This was the result of the art class taught by teacher Lamberto Hernández at the Telesecundaria #59 in La Chorera.

Darlene Boza and Paúl Marrón from Nu Haus. This couple of creative people offered an embroidery workshop (and the clock stopped ticking). Without a doubt art heals, shapes and gives things a new meaning. Darlene is an expert on needlework who guided 30 people for four hours. Every participant plunged into the world of conservation, but they did it with arrows, tread, and needle.

Lulú González, representative of Cuenta con Nosotros and Lectura en Espiral.

Our imagination set sail at full speed with the story of Yanka Yanka. Shy but curious, children, teenagers and some adults came closer with a smile on their faces. This was a story that took us to the South Pole to learn more about the emperor penguin and its habitat. At the end of the day, Lulú bid farewell by reading the tale *My beautiful birds*, a deep and touching story about a refugee child and his bird friends that helped him face difficult times.

Dual Hem from Ortiz Guevara Institute.

What used to be a plain white wall has now become a royal tern full of color; its gaze is fixed on the horizon, but it is kind enough to coexist with those around. More than just a painted wall that is now part of the school



at La Chorera, we hope it becomes a symbol of identity to the local population and for the over 30 students that participated on this painting with Dual.

Louise Aceves and Enah Fonseca.

Our dear friend Louise steered the artistic boat of the festival. She is a young illustrator who managed to inspire participants to make their own wings. In a cluttered 9x9 ft space, participants experienced a rain of color, brushstrokes, and details, which was followed by a flock of children flying with their brand new wings all over the festival.

Lupe, Ceci, Yenny, Judith, Johanna and Erik

are the names of our volunteers, our eyes, our hands, our ears. Once again, thank you all for your energy, time and commitment.

Olga, Guti, Mary, Gris, Bertha, Mariela, Alejandra, Aracely, Irene and Marcos. The communities of La Chorera and Chapala flavored the festival with their local dishes made from fresh seafood. The fish tacos, seafood stew, ceviche, clams au gratin, and oysters will be unforgettable for more than one attendant, but they will specially not forget the warmth with which these members of the local communities welcomed what looked like never ending lines of children, teens and adults.

STAFF MEMBERS OF TERRA PENINSULAR

The 3rd Bird Festival was a success, and it was greatly thanks to teamwork. Every member from the staff contributed to make this event happen. Everything, from the welcome and registration stand, the organizing committee, the support from our park rangers and colleagues from the office, the informative stand, the photos and videos, the advertising, the bird watching tours and marathon, and even discovering our master of ceremonies had the staff's hard work imprinted on it.

The festival crew was completed with the arrival of 300 attendants that joined us, which included students and teachers of CBTA, CETMAR, UABC, Oasis After School Program, Jaime Torres Bodet elementary school, and Telesecundaria #59; as well as entire families, neighbors, and friends that traveled all the way from Ensenada.

Now, we have reached the moment to go back home and get ready for the fourth trip, which will be loaded with more activities, more experiences, and more people that want to join the crew. All that is left is to keep the course and speed.

See you next year! ■





Photo: Verónica Meza

Participatory Mural Making in San Quintín

By Claudia Guzmán / Community Engagement Coordinator

One of the activities at the 3rd. Bird Festival was the making of a mural with the purpose of strengthening the bonds between nature and community, and what better than using art to express it. We invited the urban artist Christopher Delgadillo (known as Dual Hem) through the Ortiz Guevara Institute and the artist painted a royal tern (*Thalasseus maximus*) on a wall at the elementary school at La Chorera. With the guidance of the artist,

a total of 30 students participated in this activity and created the first mural that reminds us that birds are part of our daily life. ■

Dual Hem

www.facebook.com/DUALONE.ART/

Instituto Ortiz Guevara A.C.

www.facebook.com/ortizguevaraac/



Photo: Bryan Gerardo



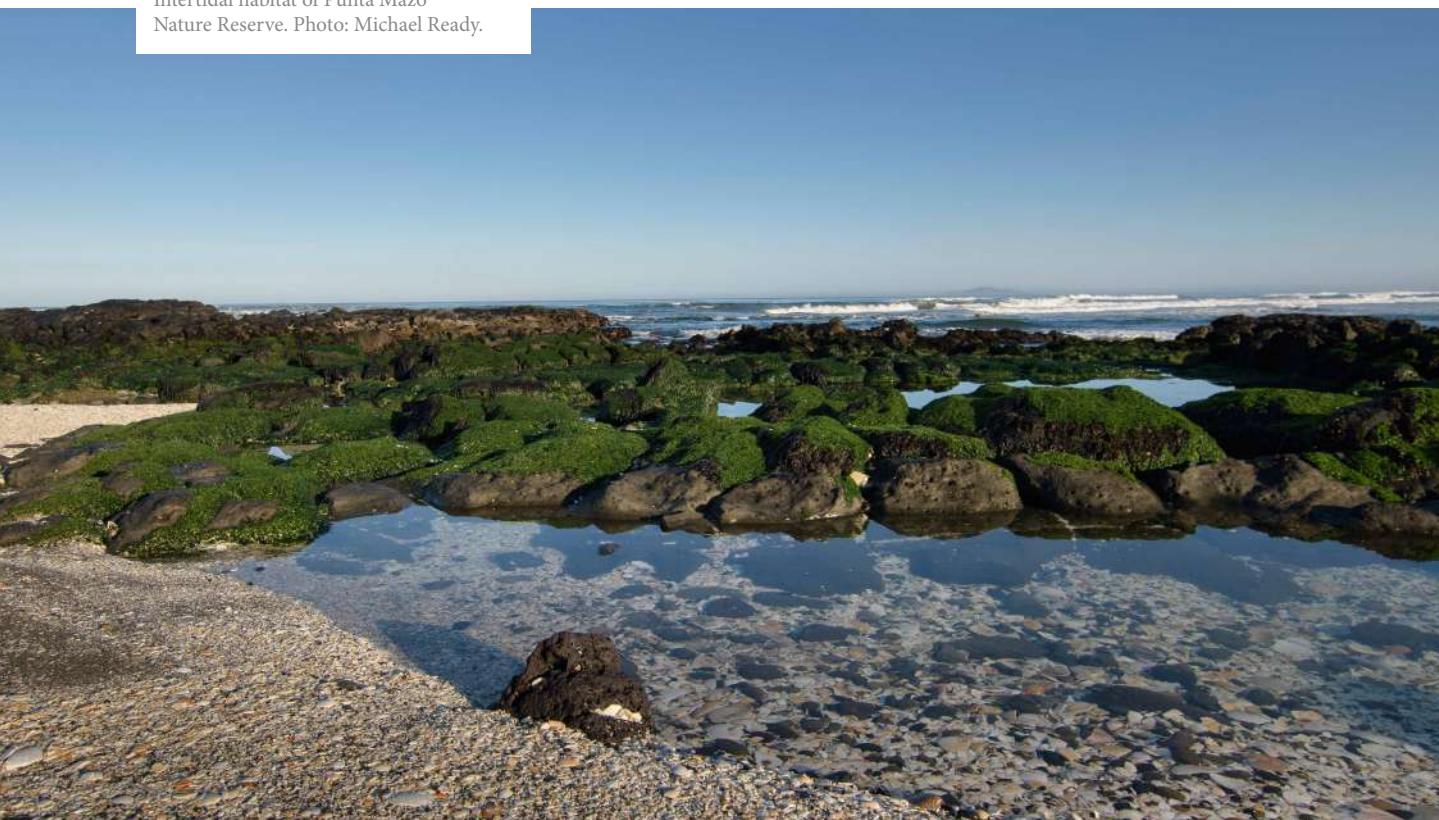
A Window to the Past

By Keith Lombardo

Imagine walking the coastline and seeing boulders covered with black shelled mollusks, stacked one on top of another, many layers thick. Now imagine this scene along the entire rocky intertidal habitat from San Francisco to Bahia Tortugas.

Black abalone (*Haliotis cracherodii*) were once one of the most abundant intertidal organisms from Central California to southern Baja California. However, 20 years of intense harvesting, starting in the early 1970s, greatly reduced their numbers. Then in the mid-1980s, the species was subjected to a disease known as withering syndrome, which further decimated the remaining populations.

Intertidal habitat of Punta Mazo Nature Reserve. Photo: Michael Ready.



As a result, black abalone are now considered extremely rare and are listed as an endangered species in the United States. It is believed that populations along the Baja California coastline have been similarly impacted as well. Unlike in the United States, extensive re-surveys have not been conducted in Baja and the current status of the species south of the border is relatively unknown. With this in mind,

Science Team 6 (www.scientceteamsix.com) headed south to Punta Mazo Nature Reserve in San Quintin Bay to explore the intertidal habitat along this magnificent piece of coastline.

During a previous trip to San Quintin, we had noticed an extensive series of volcanic benches and boulders that were exposed during low tide events. Upon our return to San Diego, we found that at least two locations near the reserve were surveyed for black abalone in 2004. Unfortunately, those surveys revealed that black



Tidepools at Punta Mazo Nature Reserve. Photo: Michael Ready.



Keith Lombardo and Sula Vanderplank documenting and measuring the ochre seastar (*Pisaster ochraceus*) in the Punta Mazo tidepools. Photo: Chad Thompson.

abalone were virtually non-existent. However, recent monitoring efforts in southern California have suggested some positive growth trends in black abalone populations. These upward trends, coupled with the sparsity of data in Baja, warranted taking a closer look along Punta Mazo coastline.

Once conspicuous, black abalone are now scarcely seen out in the open. One must crawl up, over and under boulders and peer into deep crevices to find them. Our team spent several hours each day scouring the intertidal for any sign of this now secretive species. It didn't take long to determine that the rocky intertidal along the Punta Mazo Reserve is excellent black abalone habitat. Everything this species would need is present. The only thing missing is the species itself!



Black abalone (*Haliotis cracherodii*).

Photo: Suzanne Graham.

But crawling through the intertidal and looking in every crevice and corner allows one to observe all the many other species that make up this unique habitat. What started as a black abalone survey quickly doubled as an opportunity to document the tremendous intertidal assets protected by the nature reserve. In just two 3-hour efforts, we documented nearly 70 intertidal species, including Spanish shawl (*Flabellina iodinea*), keyhole limpet (*Megathura crenulata*) and the solitary anemone (*Anthopleura sola*). Our team was in agreement that the Punta Mazo intertidal rivaled the best preserved intertidal habitats in southern California and yet somehow it seemed a bit more unique. It was like a window into the past had opened.

In many ways, Baja represents southern California of long ago when the coastlines were undeveloped and wild. As we stepped out onto the rocky intertidal benches of Punta Mazo, we might as well have been in San Diego of the 1700s. While anthropogenic impacts can be found, the Punta Mazo tidepools likely haven't changed much over the past millennia.



The team (from left to right): Stephen Whitaker, Rolf Baumberger, Adam Taylor, Michael Ready, Tavio del Rio, Sula Vanderplank, Keith Lombardo, and Chad Thompson.

Punta Mazo, and places like it in Baja California, is not only representative of our southern California past but they are simultaneously our future as well. One of the most agreed upon effects of climate change is a profound shift in species and habitats. As the planet warms, terrestrial and marine species will move poleward seeking new habitats that resemble the more favorable niches provided by their historic environments. For Baja species, the northward

march will bring them to southern California where our management actions always seem to be reactive and our plans centered on the rehabilitation of long-degraded spaces. And this is often done with little knowledge of historical baselines or reference conditions. But before us is an excellent opportunity to document and understand a relatively undisturbed series of ecosystems and apply this knowledge to future management actions.

While this initial survey effort didn't reveal any definitive signs of black abalone, the abundance of high quality habitat suggests that

we will eventually find this elusive species. But perhaps more importantly, these investigations serve as a means of documenting the biodiversity and the ecologies found within the protected areas of Baja California. Quantifying baseline species diversity is critical for any organization that aims to better understand how to protect and preserve their natural resources. Through the lens of climate change, baseline surveys and studies can also provide invaluable information to forward thinking managers who aim to proactively manage our rapidly shifting landscapes and protect the ecologies that sustain our natural systems and, ultimately, ourselves. ■



ABOUT THE AUTHOR

Keith currently serves as a Coastal Ecologist and Chief of Natural Resources & Science at Cabrillo National Monument, a unit of the National Park Service, in San Diego. His academic training focused on plant and fire ecology of the southwestern United States while his professional career has been dedicated to the coastal terrestrial and marine systems in southern California and Baja. Keith serves as an Associated Researcher for Terra Peninsular and as a Scientific Advisor for Science Team Six.

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A sampling of intertidal species found at Punta Mazo Nature Reserve. Photo: Michael Ready.



Environmental dates

February

**February 1,
2017:**

Laguna Figueira in San Quintín (218.54 acres) was certified as a destination agreement, this coastal area is protected by the Mexican government and Terra Peninsular.

2

World Wetlands Day

**February 2,
2008:**

San Quintín Bay was designated as the Wetland of International Importance no. 1775 by the Ramsar Convention

13

Golden Eagle Day (Mexico)

14

World Energy Day

March

3

World Wildlife Day

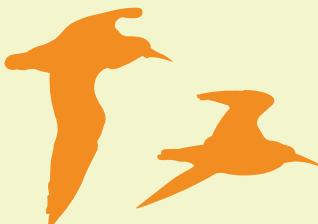
21

International Day of Forests

22

World Water Day

Upcoming events



Previous activities of the 2nd. Bahía de Todos Santos Bird Festival

Tuesday, March 6. Cinema club "Playeras al vuelo" at Caracol Museum from 3:00 p.m. to 4:00 p.m.

Wednesday, March 8. Beach cleanup at Playa Hermosa from 9:00 a.m. to 11:00 a.m.

Friday, March 9. Lectures "Encuentro por las aves: jornada de exposiciones" at the State Center of Arts (CEARTE) in Ensenada from 5:00 p.m. to 7:00 p.m. More information: www.terrapeninsular.org/festival-aves-bahia-todos-santos/

2nd. Bahía de Todos Santos Bird Festival

Saturday, March 10 from 10:00 a.m. to 5:00 p.m. at Playa Hermosa in Ensenada, Baja California. Activities: bird watching guided tours and marathon, CHILD's concert, birds of prey presentation, participatory mural, food, interactive and informative stands.

More information: www.terrapeninsular.org/festival-aves-bahia-todos-santos/



1st. Bird watching marathon in Ensenada

Participate in the first bird watching marathon in Ensenada during the 2nd. Bahía de Todos Santos Bird Festival, the goal is to register and identify the most bird species during the festival. Categories: beginners and experts.

More information: <http://terrapeninsular.org/maraton-de-observacion-de-aves/>

Ensenada Beer Fest 2018

Find the Branta Negra beer at Cervecería Escafandra's stand on March 16 and 17 at the Riviera Cultural Center, Ensenada, Baja California.



Save, recycle and make money.



By Bryan Gerardo / Community Manager

WHAT CAN BE RECYCLED?

\$2
KILOGRAM

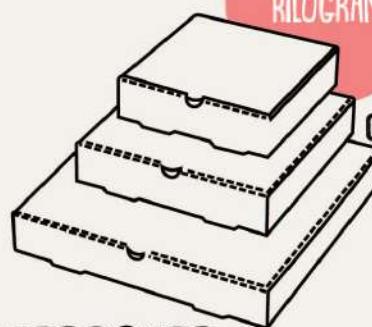


PLASTIC

CONTAINERS:

- WATER
- SODA
- JUICE
- MILK

\$1
KILOGRAM



CARDBOARD

CARDBOARD AND PAPER:

- BOXES
- PACKAGES
- BAGS
- SHEETS OF PAPER

₡25
KILOGRAM



GLASS

BOTTLES:

- BEER
- JUICE
- SODA
- ALCOHOL

\$21
KILOGRAM



ALUMINIUM

CANS:

- BEER
- SODA
- JUICE
- ENERGY BEVERAGES

*PRICES IN MEXICAN PESOS SUBJECT TO CHANGE, FEBRUARY 2018.

*1 KILOGRAM IS EQUAL TO 2.2 POUNDS.

One of the benefits of recycling is obtaining economic resources for doing this activity, in the same way we help protect our planet and reduce the excess of contaminating residues. To participate, it is necessary to differentiate the types of residues that we dispose at our home, separate them in groups, quote the offer and demand of the different recycling centers, and choose the one that will provide more money.

Prices in Mexican pesos subject to change and based on local rates in Ensenada and San Quintín in February 2018.



Glossary of terms

A**Anthropogenic impact:**

Impact on the environment caused by human activities.

Areas Voluntarily Destined for Conservation:

It is a conservation tool within the category of Natural Protected Area of federal jurisdiction. This certification is obtained through the Mexican Secretariat of Environment and Natural Resources (Semarnat in Spanish), through the National Commission of Natural Protected Areas (Conanp in Spanish), and consists of voluntarily allocating land for conservation actions.

B**Biodiversity:**

Biodiversity is the wide variety of living beings on earth.

C**Conspicuous:**

Adj. Clearly visible, evident, noticeable.

D**Destination agreement:**

The destination agreements protect the coastal zone in Mexico and are granted to a federal institution competent in the field of environmental protection for a destination of public use in order to

G

conserve ecosystems and protect flora and fauna for an indefinite period of time.

Geotourism:

Geotourism is defined as tourism that sustains or enhances the distinctive geographical character of a place—its environment, heritage, aesthetics, culture, and the well-being of its residents. [1]

I**Intertidal:**

The intertidal zone is a place of transition where abrupt changes occur due to the movement of tides. Delimited by low tide and high tide, this area is classified depending on the type of soft or rocky soil.

M**Microbial mats:**

Accumulations of autotrophic microorganisms, which use light to capture carbon, and heterotrophic microorganisms that use the carbon from autotrophic ones to make their own cells.

N**NOM-059-SEMARNAT-2010:**

Refers to the Mexican official norm that identifies flora and fauna species and populations at risk. Through

an evaluation to assess the risk of extinction, the species are classified by different categories and integrated into a list.

R**Ramsar Convention:**

The Convention on Wetlands (known as the Ramsar Convention) is a treaty for the conservation and sustainable use of wetlands and their resources that was created in Ramsar, Iran in 1971. [2]

W**Wintering:**

Non-breeding period for some migratory bird species that occurs between October and March.

[1] Ramsar Convention. Retrieved from <https://www.ramsar.org>

[2] <https://www.nationalgeographic.com/maps/geotourism/>





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